

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-71. (Canceled)

72. (Currently Amended) A graft for treatment of aneurysms or occlusive diseases comprising:

a primary graft body, said primary graft body having a primary graft flow lumen therethrough, said primary graft body comprising a ~~first portion~~ proximal end and a ~~second portion~~ distal end; and

a supplemental graft body, said supplemental graft body having a secondary graft flow lumen therethrough, said supplemental graft body comprising a first end and a second end, said first end of said supplemental graft body being dockable to said second portion of said primary graft body while inside of a vessel to define a single flow lumen which transfers substantially all flow between said primary graft flow lumen and said secondary graft flow lumen;

wherein said primary graft body is carried by a plurality of separated wire hoops each having a sinuous configuration with a plurality of apices, said plurality of separated wire hoops each having a circumference that lies in a plane substantially perpendicular to a common axis and each being axially displaced in a tubular configuration along the common axis;

wherein said plurality of separated wire hoops of said primary graft body includes hoops associated with said proximal end and said distal end that have a unit width between said apices and intermediate hoops between the loops associated with

said proximal end and said distal end that have a width between said apices greater than the unit width; and

wherein each of said plurality of separated wire hoops comprises two opposing ends, said ends on adjacent wire loops being joined together on the outside surface of said primary graft body at a number of juxtaposed apices.

73. (Previously Presented) The graft as defined in claim 72, wherein at least one of the wire hoops is attached to said primary graft body via sutures.

74. (Previously Presented) The graft as defined in claim 72, wherein at least one of the wire hoops is attached to said primary graft body.

75. (Previously Presented) The graft as defined in claim 72, wherein said supplemental graft body is carried by a plurality of wire hoops.

76. (Currently Amended) A graft for treatment of aneurysms or occlusive diseases comprising:

a primary graft body, said primary graft body having a primary graft flow lumen therethrough, said primary graft body comprising a ~~first portion~~ proximal end and a ~~second portion~~ distal end; and

a supplemental graft body, said supplemental graft body having a secondary graft flow lumen therethrough, said supplemental graft body comprising a first end and a second end, said first end of said supplemental graft body being dockable to said second portion of said primary graft body while inside of a vessel to define a single flow lumen which transfers substantially all flow between said primary graft flow lumen and said secondary graft flow lumen;

wherein said supplemental graft body is carried by a plurality of separated wire hoops each having a sinuous configuration with a plurality of apices, said plurality of separated wire hoops each having a circumference that lies in a plane

substantially perpendicular to a common axis and each being axially displaced in a tubular configuration along the common axis;

wherein said plurality of separated wire hoops of said primary graft body includes hoops associated with said proximal end and said distal end that have a unit width between said apices and intermediate hoops between the loops associated with said proximal end and said distal end that have a width between said apices greater than the unit width; and

wherein each of said plurality of separated wire hoops comprises two opposing ends, said ends on adjacent wire loops being joined together on the outside surface of said primary graft body at a number of juxtaposed apices.

77. (Previously Presented) The graft as defined in claim 75, wherein at least one of the wire hoops is attached to said supplemental graft body via sutures.

78. (Previously Presented) The graft as defined in claim 75, wherein at least one of the wire hoops is attached to said supplemental graft body.

79. (Previously Presented) The graft as defined in claim 72, wherein at least one of the wire hoops has a different amplitude than the next adjacent wire hoop.

80. (Previously Presented) The graft as defined in claim 75, wherein at least one of the wire hoops has a different amplitude than the next adjacent wire hoop.

81. (Previously Presented) The graft as defined in claim 72, wherein one of the wire hoops is located at one end of the primary graft body and has alternate apices extending beyond said one end of the primary graft body.

82-83. (Canceled)

84. (Previously Presented) The graft as defined in claim 72, wherein said primary graft body and said supplemental graft body are formed of a thin biocompatible material.

85-94. (Canceled)

95. (Previously Presented) The graft of claim 97 wherein the wire structure is formed of a metal.

96. (Previously Presented) The graft of claim 97 wherein the wire structure is sutured to the respective graft body.

97. (Currently Amended) A graft comprising:

a first graft body, said first graft body having a first graft body proximal end and a first graft body distal ~~portion~~ end to define a flow passage therethrough; and

a second graft body, said second graft body having a second graft body proximal portion and a second graft body distal portion to define a flow passage therethrough;

said second graft body proximal portion being attachable in an overlapping relationship with said first graft body distal portion while inside of a vessel to define a continuous flow passage through said first graft body proximal end, said first graft body distal portion, said second graft body proximal portion and said second graft body distal portion;

wherein at least one of the first graft body and the second graft body is carried by a wire structure comprising a plurality of separated wire hoops each having a sinuous configuration with a plurality of apices, said plurality of separated wire hoops each having a circumference that lies in a plane substantially perpendicular to a common axis and each being axially displaced in a tubular configuration along the common axis; and

wherein at least one of the first graft body and the second graft body is a multi-layered graft body and the wire structure is sandwiched between layers of said multi-layered graft body;

wherein said plurality of separated wire hoops of said first graft body includes hoops associated with said proximal end and said distal end that have a unit width between said apices and intermediate hoops between the loops associated with said proximal end and said distal end that have a width between said apices greater than the unit width; and

wherein each of said plurality of separated wire hoops comprises two opposing ends, said ends on adjacent wire loops being joined together on the outside surface of said primary graft body at a number of juxtaposed apices.

98. (Previously Presented) The graft of claim 97 wherein at least a portion of one of the first graft body and the second graft body is made of PTFE.

99. (Previously Presented) The graft of claim 97 wherein the wire structure is disposed at least in part on an outside surface of the respective graft body.

100. (Previously Presented) The graft of claim 97 wherein the wire structure is disposed substantially on an inside surface of the respective graft body.

101. (Previously Presented) The graft of claim 97 wherein the wire structure is interwoven with the surface of the respective graft body.

102. (Previously Presented) The graft of claim 97 wherein the wire structure is X-ray detectable.

103. (Currently Amended) A graft comprising:

a first graft body, said first graft body having a first graft body proximal end and a first graft body distal ~~portion~~ end to define a flow passage therethrough; and

a second graft body, said second graft body having a second graft body proximal portion and a second graft body distal portion to define a flow passage therethrough;

said second graft body proximal portion being attachable in an overlapping relationship with said first graft body distal portion while inside of a vessel to define a continuous flow passage through said first graft body proximal end, said first graft body distal portion, said second graft body proximal portion and said second graft body distal portion;

wherein the second graft body is frusto-conical in shape;

wherein at least one of the first graft body and the second graft body is carried by a wire structure comprising a plurality of separated wire hoops each having a sinuous configuration with a plurality of apices, said plurality of separated wire hoops each having a circumference that lies in a plane substantially perpendicular to a common axis and each being axially displaced in a tubular configuration along the common axis;

wherein said plurality of separated wire hoops of said first graft body includes hoops associated with said proximal end and said distal end that have a unit width between said apices and intermediate hoops between the loops associated with said proximal end and said distal end that have a width between said apices greater than the unit width; and

wherein each of said plurality of separated wire hoops comprises two opposing ends, said ends on adjacent wire loops being joined together on the outside surface of said primary graft body at a number of juxtaposed apices.

104. (Previously Presented) The graft of claim 97 wherein the second graft body is substantially cylindrical.

105. (Previously Presented) The graft of claim 97 wherein one of the first graft body and the second graft body comprises a frustoconical portion.

106. (Previously Presented) The graft of claim 105 wherein said frustoconical portion is about 18 mm in length.

107-109. (Canceled)

110. (Previously Presented) The graft of claim 133 wherein the metal wire structure comprises at least one wireform.

111. (Previously Presented) The graft of claim 110 wherein said at least one wireform has a sinuous configuration.

112. (Previously Presented) The graft of claim 133 wherein the metal wire structure comprises a plurality of wireforms.

113-128. (Canceled)

129. (Previously Presented) The graft for treatment of aneurysms or occlusive diseases as claimed in claim 133, wherein a portion of at least one of said first graft body and said second graft body and said metal wire structure has a radiopaque marker, said radiopaque marker facilitating proper alignment of said first graft body and said second graft body with respect to one another during said engagement.

130. (Previously Presented) The graft for treatment of aneurysms or occlusive diseases as claimed in claim 133 further comprising:

a radiopaque marker on at least one of said first graft body and said second graft body and said metal wire structure, wherein the profile of said radiopaque marker varies with the rotation of said at least one of said first graft body and said second graft body and said metal wire structure in a body lumen;

wherein the rotation of said at least one of said first graft body and said second graft body and said metal wire structure in the body lumen is indicated by said profile for optional adjustment of the rotation.

131. (Currently Amended) The graft for treatment of aneurysms or occlusive diseases as claimed in claim 133, further including a [[[A]] system for introducing the graft for treatment of aneurysms or occlusive diseases of claim 133 into a vessel to define a continuous lumen, said system comprising:

a first introducer for introducing said first graft body of said graft for treatment of aneurysms or occlusive diseases into the vessel, said first graft body having a portion adapted for connection to said second graft body; and

a second introducer for (a) introducing said second graft body of said graft for treatment of aneurysms or occlusive diseases in a radially compressed state into the vessel and into said portion of said first graft body, and (b) deploying said second graft body to connect to said portion of said first graft body and to define said continuous lumen through said first graft body and said second graft body.

132. (Currently Amended) The graft for treatment of aneurysms or occlusive diseases as claimed in claim 133, one of said first graft body and said second graft body being configured for placement at an ~~anageological~~ angiological bifurcation of a vessel into two branched vessels, one of said first graft body and said second graft body being at least partially supported by a bifurcated stent member, defining two lumens, at least one of which is configured to be disposed entirely within said vessel and is adapted to mate with the other of said first graft body and said second graft body configured to extend into one of the two branched vessels.

133. (Currently Amended) A graft for treatment of aneurysms or occlusive diseases comprising:

a first graft body, said first graft body having a proximal end and a distal ~~portion end~~ to define a flow passage therethrough; and

a second graft body, said second graft body having a proximal portion and a distal portion to define a flow passage therethrough;

said proximal portion of said second graft body being attachable in an overlapping relationship with said distal portion of said first graft body while inside of a vessel to define a continuous flow passage between said proximal end and said distal portion of said first graft body and said proximal portion and said distal portion of said second graft body;

wherein at least one of the first graft body and the second graft body is carried by a metal wire structure[[,]] comprising a plurality of separated wire hoops each having a sinuous configuration with a plurality of apices, said plurality of separated wire hoops each having a circumference that lies in a plane substantially perpendicular to a common axis and each being axially displaced in a tubular configuration along the common axis;

wherein said plurality of separated wire hoops of said first graft body includes hoops associated with said proximal end and said distal end that have a unit width between said apices and intermediate hoops between the loops associated with said proximal end and said distal end that have a width between said apices greater than the unit width;

wherein each of said plurality of separated wire hoops comprises two opposing ends, said ends on adjacent wire loops being joined together on the outside surface of said primary graft body at a number of juxtaposed apices; and

said graft comprising a male engaging portion on a selected one of said first graft body and said second graft body, and a female portion on another one of said first graft body and said second graft body, said male engaging portion being configured to be positioned at least partially within said female portion for inter-engagement between the outer surface of said male engaging portion and the inner surface of said female portion to resist longitudinal movement to prevent separation of said first graft body and said second graft body in service, each of said male engaging portion and said female portion comprising a stent and at least one of said first graft body and said second graft body comprising a graft layer attached to said

stent, said graft layer being configured to be interposed between said male engaging portion and said female portion to form a substantially fluid-tight seal upon assembly.